

Abstract

Method and apparatus for determination of initialization states in pseudo-noise sequences

The method makes it possible to determine, by calculation, a state, which has  $n$  bits and is iterated  $N$  times, of a shift register arrangement from a given initial state. This allows pseudo-noise sequences with any desired offset  $N$  to be produced, without prior iterations having to be carried out for this purpose. A matrix whose  $j$ -th row, where  $j=1,\dots,n$ , is given by the coefficients of that representative of the remaining class  $[x^{N+j-1}] \bmod f^*$  whose degree is less than  $n$  is used for calculation of the  $n$  state, which is iterated  $N$  times.